

# COMPUTER-BASED INTERACTIVE TRAINING

Computer-Based Interactive Training (CBIT) is interactive, self-paced training delivered via the computer. It is often better and more cost-effective than alternative methods of training. It consistently improves quality and solves critical operational problems, which are difficult to solve in other ways.

#### **CBIT IS USED TO**

- Train correct procedures through practice and simulation
- Deliver skills training and knowledge through graphically presented drills and practice
- Bring the subject to life through graphics and interactive "see and do" methods
- Teach new procedures or deliver product training

### CBIT CAN TEACH A STUDENT TO A PREDETERMINED LEVEL OF SKILLS & ABILITIES

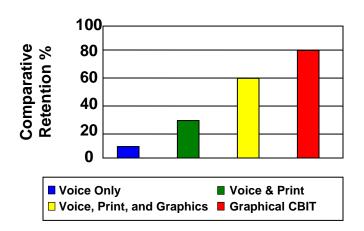
- Awareness
- Understanding (knowledge)
- Proficiency (to a specific level)
  - Accuracy
  - Speed
  - Problem solving/decision-making
  - Manipulation

## CBIT CAN USE SEVERAL LEVELS AND METHODS OF REINFORCEMENT AND STUDENT INVOLVEMENT

- Questions or situations with feedback that is supportive or corrective
- Repetitive functions with feedback that includes positive reinforcement, correction, and an indication of overall speed and/or accuracy
- Simulations of processes and functions that require student involvement and provide reinforcement and correction upon completion

#### INFORMATION RETENTION

Studies suggest retention of material presented through CBIT using modern strategies of education engineering and interactive tutorial and testing, including graphics, animation, and audio, have a retention – at a minimum – of double that of video, instructor-led, or text-based training.





In addition to increased student retention, on average, a CBIT program will train a student in half the time of instructor-led training.

CBIT can be used on an individual basis and can simultaneously train any number of students at different locations with no travel or instructor cost. All that is needed is a computer, the CBIT program, and training time.

#### HOW IS CBIT DEVELOPED?

Russell Associates develops Computer-Based Interactive Training using a "team" approach. A CBIT development team consists of people with varying skills:

- Instructional designers
- Writers
- Programmers
- Graphic artists
- Animators

The Russell Associates development process is critical to consistently developing quality training that is effective and efficient. The development process consists of:

- Developing a list of competencies (what a student must know or be able to do and at what level)
- Researching the subject
- Developing outlines
- Developing storyboards and scripts
- Programming, to include graphics and animation
- Developing and incorporating assessment component
- Alpha and beta testing
- Reproduction/Distribution

#### WHY USE CBIT?

Properly designed Computer-Based Interactive Training reduces, or in many cases eliminates, the need for instructor-led or instructor-monitored training. The computer is used effectively to:

- Present information
- Give examples or demonstrations
- Involve the student in the process or task
- Provide feedback to the student
- Assess the student's knowledge, skill, and/or accuracy, and in many cases determine the next step of training based on the student's performance

It is easy and economical to modify and expand CBIT so clients do not feel "locked-in" if they choose this training option.



#### BENEFITS OF USING CBIT

#### **BETTER:**

- CBIT provides an educational medium incorporating text, audio, animation, video, graphics, and photographs to more clearly present complicated subjects and it's all delivered on a personal computer
- CBIT provides immediate feedback and positive reinforcement of learning, teaches correct procedures through practice and simulations, and brings the subject to life through interactive "see, hear and do" methods
- Retention of material presented through CBIT is at least double that of instructor-led or text-based training
- CBIT eliminates the risk of costly errors experienced when learning with actual equipment or systems
- The student is involved in a computer-orchestrated learning experience that is interesting, self-paced, pleasant, and effective
- CBIT improves the quality, effectiveness, and consistency of training
- The student may repeat the course at his/her convenience
- CBIT tests the student on what has been presented and tracks test scores
- The student benefits from training in a familiar setting

#### **FASTER:**

- A properly-designed CBIT program consistently trains students in half the time of an instructor-led training program
- CBIT allows you to monitor a student's progress and evaluate performance, permitting quick and easy assessment of the student's skills and potential

#### **COST-EFFECTIVE**:

- CBIT saves money. Initial and long-term costs are reduced
- The need for instructor time is reduced
- CBIT reduces the time the student spends in training, thus the student spends more time "on the job"
- CBIT reduces or eliminates travel time and associated costs
- The need and cost of classroom or one-on-one instruction is minimized
- Training is delivered better, faster, and easier than alternative methods
- Common equipment and facilities can be used to deliver the training

The bottom line is **CBIT works!** It is fast, supportive, effective, and fun. CBIT rewards effort and is always fair. It increases self-esteem, and knowledge.